

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/609,147	06/27/2003	Ronald Knegtel	VPI/02-110 US	6705	
27916 7:	590 10/05/2005		EXAMINER		
VERTEX PHARMACEUTICALS INC.			WARD, I	WARD, PAUL V	
130 WAVERLY STREET CAMBRIDGE, MA 02139-4242			ART UNIT	PAPER NUMBER	
	,	•	1623		
		•	DATE MAILED: 10/05/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/609,147	KNEGTEL ET AL.				
		Examiner	Art Unit				
		PAUL V. WARD	1623				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)	Responsive to communication(s) filed on						
·	,	action is non-final.	•				
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
4)	Claim(s) 1-33 is/are pending in the application.						
·	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠	5)⊠ Claim(s) <u>1-21 and 31-33</u> is/are allowed.						
6)⊠	6)⊠ Claim(s) <u>22-30</u> is/are rejected.						
7)	7) Claim(s) is/are objected to.						
8)□	8) Claim(s) are subject to restriction and/or election requirement.						
Applicati	on Papers						
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
• —	☐ All b)☐ Some * c)☐ None of:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
	1. Certified copies of the priority documents	s have been received.	•				
	2. Certified copies of the priority documents		on No				
	3. Copies of the certified copies of the prior						
	application from the International Bureau	PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	t(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
	2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date 6) Other:							
IS Patent and T	radamad Office						

Art Unit: 1623

DETAILED ACTION

STATUS: The Examiner has withdrawn the restriction requirement dated July 14, 2004 and is rejoining claims 22-30. Current pending claims are 1-33, in which an action on the merits is contained herein below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The determination that "undue experimentation" would have been needed to make and use the claimed invention is not a single, simple factual determination.

Rather, it is a conclusion reached by weighing all the above noted factual considerations. In re Wands, 858 F.2d at 737, 8 USPQ2d at 1404.

There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue".

These factors include, but are not limited to:

- (A) The breadth of the claims;
- (B) The nature of the invention:

Application/Control Number: 10/609,147 Page 3

Art Unit: 1623

(C) The state of the prior art;

- (D) The level of one of ordinary skill;
- (E) The level of predictability in the art;
- (F) The amount of direction provided by the inventor;
- (G) The existence of working examples; and
- (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

The breadth of the claims

The breadth of the instant claims is seen to encompass methods for treating a

Art Unit: 1623

patient, wherein said disease is selected from an IL-1 mediated disease, an apoptosis mediated disease, an inflammatory disease, an autoimmune disease, a destructive bone disorder, a proliforative disorder, an infectious disease, a degenerative disease, a disease associated with cell death, an excess dietary alcohol intake disease, a viral mediated disease, retinal disorders, uveitis, inflammatory peritonitis, osteoarthritis, pancrentitis, asthma, adult respiratory distress syndrome, glomerulonephritie, rheumatoid arthritis, systemic lupus erythematosus, scleroderma, chronic thyroiditis, Grave's disease, autoimmune gastritis, diabetes, autoimmune hemolytic anemia, autoimmune neutropenia, thrombocytopenia, chronic active hepatitis, myasthenia gravis, inflammatoxy bowel disease, Crohn's disease, psoriasis, atopic dermatitis, scarring, graft vs host disease. organ transplant rejection, organ apoptosis after burn injury, osteoporosis. leukemias and related disorders, myelodysplastic syndrome, multiple myeloma-related bone disorder, acute myelogenous leukemia, chronic myelogenous leukemia, metastatic melanoma, Kaposi's sarcoms, multiple myeloma, haemorrhagic shock, sepsis, septic shock, burns, Shigellowis, Alzheimer's diseass. Parkinson's disease, Huntington's disease, Kennedy's disease, prion disease, cerebral ischemia, epilepsy, myocardial ischemia, acute and chronic heart disease, myocardial infarction, congestive heart failure, atherosclerosis, coronary artery bypass graft, spinal muscular atrophy, amyotrophic lateral sclerosis, multiple sclerosis, HIV-related encephalitis, aging, alopecia, neurological damage due to stroke, ulcerative colitis, traumatic brain injury, spinal cord injury, hepaticis-B, hepatitis-C, hepaticis-G, yellow fever, dengue fever, or Japanese encephalitis, various forms of liver disease, renal disease, polycystic kidney disease, K. pylori-associated gastric and duodonal ulcer

disease. HIV infection, tuberculosis, meningitis, organ failure, treating complications associated with coronary artery bypass grafts, and an immunotherapy for the treatment of various forms of cancer; Application/Control Number: 10/609,147 Page 5

Art Unit: 1623

Applicant failed to exactly defined how to prevent these diseases. Additionally, it is clear that Applicant has not limited his definition of treating to one particular disease. Thus, claims 22-30 are extremely broad.

The nature of the invention.

Currently, there are no known agents with the therapeutic efficacy to treat the disorders listed above. The art does not disclose an active agent or combination of active agents, which is recognized as treatment for the conditions cited supra. The prior art does not teach or disclose a treatment modality wherein healthy subjects are treated with an active agent or agents and there is no evidence that none of the associated symptoms or disease state characteristics are ever manifested. The disclosure does not direct the skilled artisan to an art, which satisfies the requirement for treating a disease state associated with the conditions cited supra.

The level of predictability in the art.

Since the art does not disclose any therapeutic agents, the skilled artisan would not predict, in the absence of proof to the contrary, that the active agent(s) instantly claimed are efficacious in treating the conditions as broadly claimed. The assertion of a broad application, as set forth in the instant method claims, necessarily requires evidence to support Applicant's asserted methods. The Examiner notes there are no known agents recognized as treatable agents, and one of skill in this art could not predict, from the evidence of record, that the active agents asserted to be useful in the instantly claimed method, can indeed treat the conditions cited supra.

The amount of direction provided by the inventor.

Page 6

The Examiner notes, there is not seen sufficient guidance provided in the form of administration profiles, combination ratios of the active agents or reference to the same in the prior art to provide the skilled artisan with sufficient guidance to practice the instant method. The data and evidence provided in the instant disclosure leads the examiner to doubt the objective truth of assertions of treatment of any of the conditions.

The existence of working examples.

There is not seen in the disclosure, sufficient evidence to support Applicant's claims of prevention. There is not seen sufficient working examples or data from references of the prior art providing a nexus between that which applicant asserts as proof of a method for treating the conditions cited supra or extrapolation from the data and evidence currently provided on the record to support methods drawn to treating any condition.

The level of one of ordinary skill.

The ordinary skill artisan would not be able to practice the claimed invention of treating the conditions cited supra with the current disclosure.

The quantity of experimentation.

A great deal of experimentation is required. In lieu of the fact that no animal models exist which can reasonably suggest successful treatment of any of the conditions, it may be necessary for an ordinary skilled artisan to have clinical data in order to practice the claimed invention.

Thus, it can be safely concluded that the instant case fails to provide an enabling disclosure for the treatment of the disorders/conditions cited supra.

Allowable Subject Matter

Claims 1-21 and 31-33 are allowed. The compounds in claims 1-21 and 31-33 were neither found to be obvious nor anticipated by the prior art of record. The prior art does not teach or suggest the presently claimed compounds.

Conclusion

Claims 1-33 are pending. Claims 22-30 are rejected. Claims 1-21 and 31-33 are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL V. WARD whose telephone number is 571-272-2909. The examiner can normally be reached on M-F 8 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/609,147

Art Unit: 1623

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James O. Wilson

Supervisory Patent Examiner echnology Center 1600